

REMARKS

Applicant has amended the claims to more particularly define the invention taking into consideration the outstanding Official Action. Claims 29, 32 and 35 have been amended to change their dependency from claim 27 to claim 28. Claim 27 does not refer to any flange but the flanges are recited in claim 28. The amendments to the claims were made to provide proper antecedent basis for the expression "the flanges" in claims 29, 32 and 35 by changing the dependencies of these claims from claim 27 to claim 28.

Claim 36 has been canceled as a duplicate claim. Claim 37 has been added to the application to further specify the method which includes the addition of an aerosol medicament to the dispenser. Claims 38 through 40 have been added to further specific aspects of the invention. All of the added claims are fully supported by Applicant's specification. Applicant most respectfully submits that all of the claims now present in the application, claims 20-35 and claims 37 through 40 are in full compliance with 35 U.S.C. 112 and are clearly patentable over the references of record.

The Official Action contains three obviousness rejections of all the claims over various references. The primary reference in each rejection is the Goncalves reference which was referred to in the Board of Appeals' decision reversing the Examiner's prior art obviousness rejections on appeal. The Board noted that the Goncalves reference discloses an aerosol container having a metal body 2, a closure 3, the body and closure being joined by welding together interengaging flanges 7, 9 of each of them, using a laser beam and referring to Figure 2. The Board notes that given this disclosure it should be ascertained whether it would have been obvious in view of Welter, to join the body and closure of the Goncalves container by means of ultrasonic welding instead of laser welding. (Emphasis added.) The Board further noted that the Goncalves reference was in the French language and requested that a translation of the reference be obtained. The Board drew no conclusion with respect to the obviousness of the claimed invention over this reference but left this determination to the Examiner.

The Examiner concluded that the claimed invention is obvious over Goncalves in view of Welter. Specifically, claims 20-22 and 27-31 have been rejected under 35 USC 103 over Goncalves in view of Welter in the outstanding Official Action. This rejection having been carefully considered is most respectfully traversed. Applicant most respectfully submits that the required motivation to combine the references is not present in the prior art and is only found in Applicant's specification which may not be relied upon as a teaching reference. In this regard, the teachings of the references as a whole must be taken into consideration and "obvious to try" is not the standard of obviousness under 35 U.S.C. 103.

The Goncalves reference is in French and this discussion is based upon the translation kindly provided by the Examiner in the outstanding Official Action of July 27, 2001. Any discussion with respect to a page number is a reference to the page number of the translation provided by the Examiner.

As noted on page 2 of Goncalves, the present invention pertains to pressurized containers of the "aerosol bomb" type, used for example for packaging and distribution of cosmetic or cleaning products, these containers being provided with a dispensing valve allowing the user, by operating a push button that is connected to the valve to cause the ejection of the product to be dispensed. The product to be dispensed is further characterized on page 3 as a low-cost product such as cleaning products. There is no suggestion that the container may be used to dispense an aerosol medicament which is an object of the present invention and as specifically claimed, see claims 26 and 38 to 40. The requirements for an aerosol dispenser for a medicament are clearly different than for a low-cost product as described in Goncalves as would be appreciated by one of ordinary skill in the art to which the invention pertains. Such requirements include accuracy of the metered dose and stability of the medicament which includes preventing leakage in or out of the dispenser.

As discussed on page 4 of Goncalves, it is noted that containers that have a wide upper opening have problems in forming such containers by crimping of the base to the dome and it is the object of the Goncalves invention to overcome this problem by the use of laser welding which allows one to avoid crimping which has presented

some problems. The presently claimed invention includes claims wherein the flanges are welded, rolled and crimped together. Clearly, there is no motivation in Goncalves which would suggest to one of ordinary skill in the art crimping and any attempt to modify the Goncalves primary reference to include crimping or the use of additional equipment ignores the explicit teaching in Goncalves that the object of the invention is to avoid crimping of the closure to the container body and the additional apparatus associated therewith. Thus, Goncalves teaches away from crimping and is not combinable with the prior art cited in the rejections. Goncalves avoids crimping by welding by means of a laser which, as would be appreciated by one of ordinary skill in the art, is completely different from welding by ultrasonic means as required by the presently claimed invention. There is nothing in the references which teach the equivalence of the two types of welding.

The difference between ultrasonic and laser welding would be appreciated by one of ordinary skill in the art who would not substitute ultrasonic welding for laser welding as taught by Goncalves in the Goncalves invention since one of the objects of Goncalves in using laser welding is to eliminate the apparatus for crimping. However, ultrasonic welding requires additional equipment in the form of a horn which would lead one of ordinary skill in the art away from substituting ultrasound welding for laser welding as taught by Goncalves. Goncalves does not suggest that any type of welding can be used, but is specific to laser welding and this teaching cannot be ignored in determining the motivation to modify the reference and the teaching of the prior art as a whole. Absent any teaching of the equivalents of ultrasound welding and laser welding, the rejection is based upon hindsight or at most "obvious to try", which in neither case, establishes a prima facie case of obviousness for the presently claimed invention. Accordingly, it is most respectfully requested that this rejection be withdrawn.

The rejection of claims 23-25, 30 and 32-36 under 35 U.S.C. 103 as being unpatentable over Goncalves in view of Welter as applied to claim 20 above, and further in view of Mascia et al. has been carefully considered but is most respectfully traversed.

In the Official Action it is urged that Goncalves lacks the flanges rolled and crimped together. Mascia et al. shows a closure 16 and body 12 having flat flanges which are rolled and crimped together. It is then urged that it would have been obvious to one of ordinary skill in the art to have modified the Goncalves flanges with flanges which are rolled and crimped together as taught by Mascia et al. as an alternative equivalent means for attaching a closure to the body by an aerosol dispenser. This aspect of the rejection is clearly in error and the rejection is most respectfully traversed. Clearly, Goncalves fairly teaches to one of ordinary skill in the art that rolling and crimping are not the equivalent of laser welding. The whole object of the Goncalves reference is to avoid rolling and crimping and the additional apparatus associated therewith. Any modification to combine the teachings of the references is based upon Applicant's specification and impermissible hindsight.

Clearly, one of ordinary skill in the art would not combine the references as suggested in the Official Action since Goncalves expressly teaches to avoid crimping of the precise closure referred to in the Official Action. It is the very purpose of the Goncalves reference to avoid crimping. Moreover, there is no recognition of the problem solved by this further aspect of the present invention to avoid exposing the welded joint to a peel force as stated at page 7 of Applicant's specification. Accordingly, it is most respectfully requested that this aspect of the rejection be withdrawn.

The rejection of claim 26 under 35 U.S.C. 103 as unpatentable over Goncalves in view of Welter as applied to claim 20 above and further in view of Ryden has been carefully considered but is most respectfully traversed.

Applicant agrees with the Examiner's statement that Goncalves lacks the aerosol dispenser as an inhaler. Again, Goncalves is directed to a completely different type of aerosol which relates to cleaning fluids and cosmetics. Compare the shape and contents of the container in Ryden with that of Goncalves. As would be appreciated by one of ordinary skill in the art, inhalers for dispensing a medicament are completely different in structure and effect from an aerosol dispenser for a cleaning product. These differences would not be ignored by one of ordinary skill in the art and there is no motivation by one of ordinary skill in the art to add an aerosol medicament to a

container which is clearly described as being directed to cosmetics and cleaners and other low-cost production items. The requirements for metering a medicament and the formation of an aerosol formulation as well as the stability of the product are all factors which need to be considered and which would not be ignored by one of ordinary skill in the art. Therefore, the combination suggested by the Examiner is not suggested by the references but is based upon Applicant's disclosure which is improper hindsight. Accordingly, it is most respectfully requested that this rejection be withdrawn.

In view of the above comments and further amendments to the specification and claims, favorable reconsideration and allowance of all the claims now present in the application are most respectfully requested.

Respectfully submitted,
BACON & THOMAS, PLLC

By: Richard E. Fichter
Richard E. Fichter
Registration No. 26,382

625 Slaters Lane - 4th Fl.
Alexandria, Virginia 22314
Phone: (703) 683-0500
Facsimile: (703)683-1080
REF:kdd
A04.wpd

October 12, 2001

Marked-Up Version Showing Changes Made

IN THE CLAIMS:

Please replace claims 29, 32 and 35 with the following replacement claims.

29(Amended). A method of assembling an aerosol dispenser according to claim [27] 28, wherein the flanges are welded together by means of an ultrasonic welding head which is brought into communication with the flanges and moved circumferentially along the flanges to create a substantially continuous weld between the flanges until a complete revolution about the axis of the closure and body has been performed.

32(Amended). A method of assembling an aerosol dispenser according to claim [27] 28 wherein the flanges are bent to lie in a substantially axial direction after the flanges have been welded together.

35(Amended). A method of assembling an aerosol dispenser according to claim [27] 28 wherein one of the said flanges is of greater width than the other and after the flanges have been welded together the wider flange is rolled and crimped around the other flange.